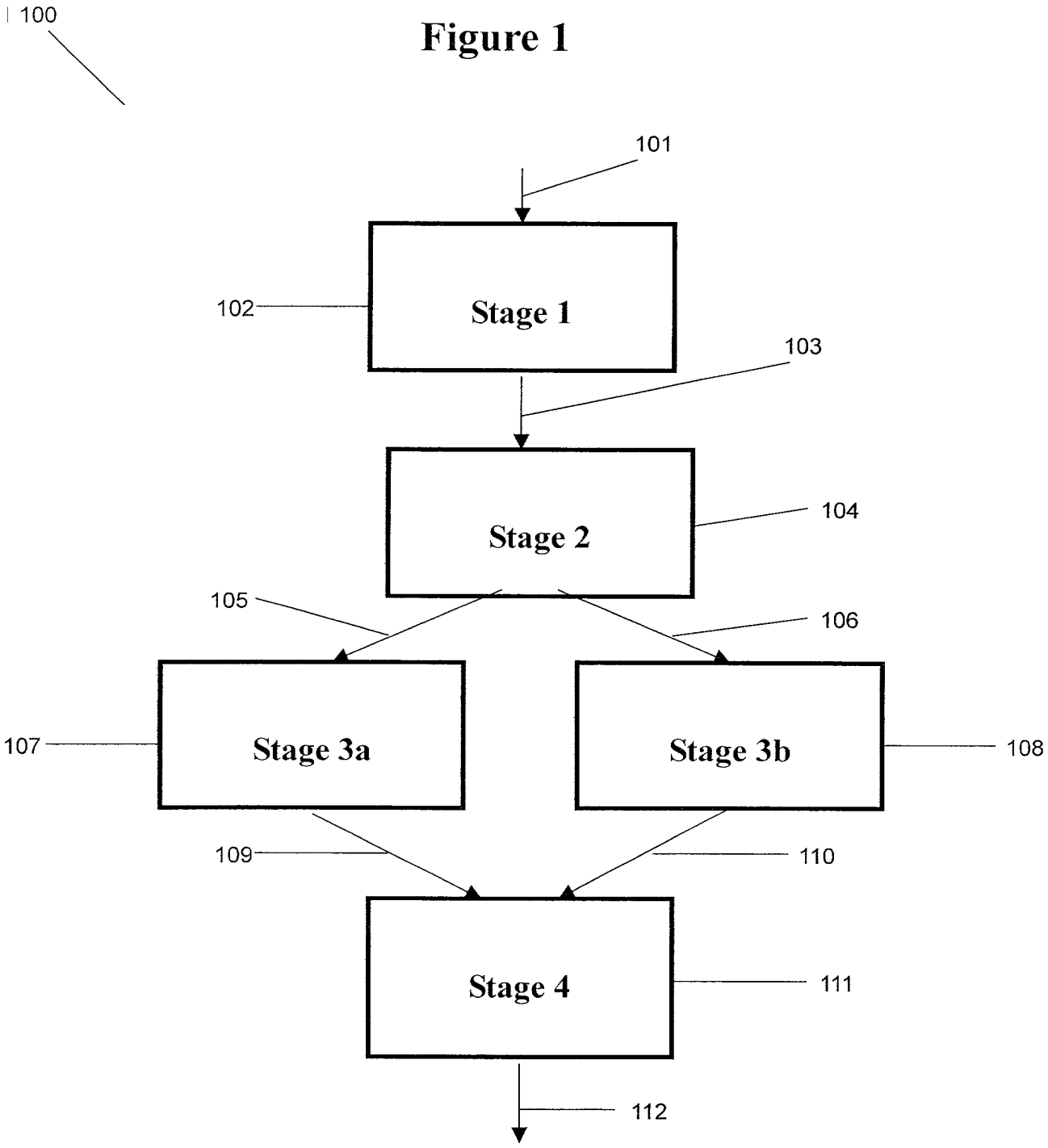
Figure 1


100
101
Stage 1
102
103
Stage 2
104
105
106
Stage 3a
107
Stage 3b
108
109
110
Stage 4
111
112

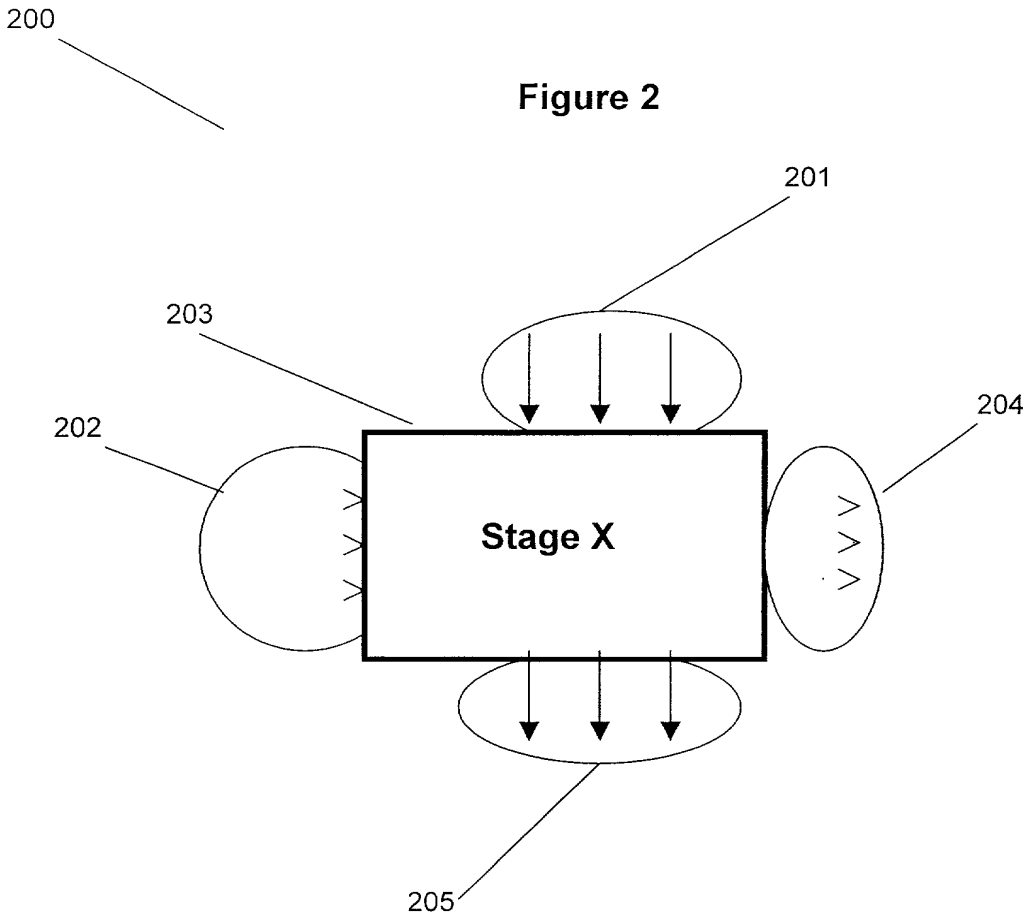


Figure 2

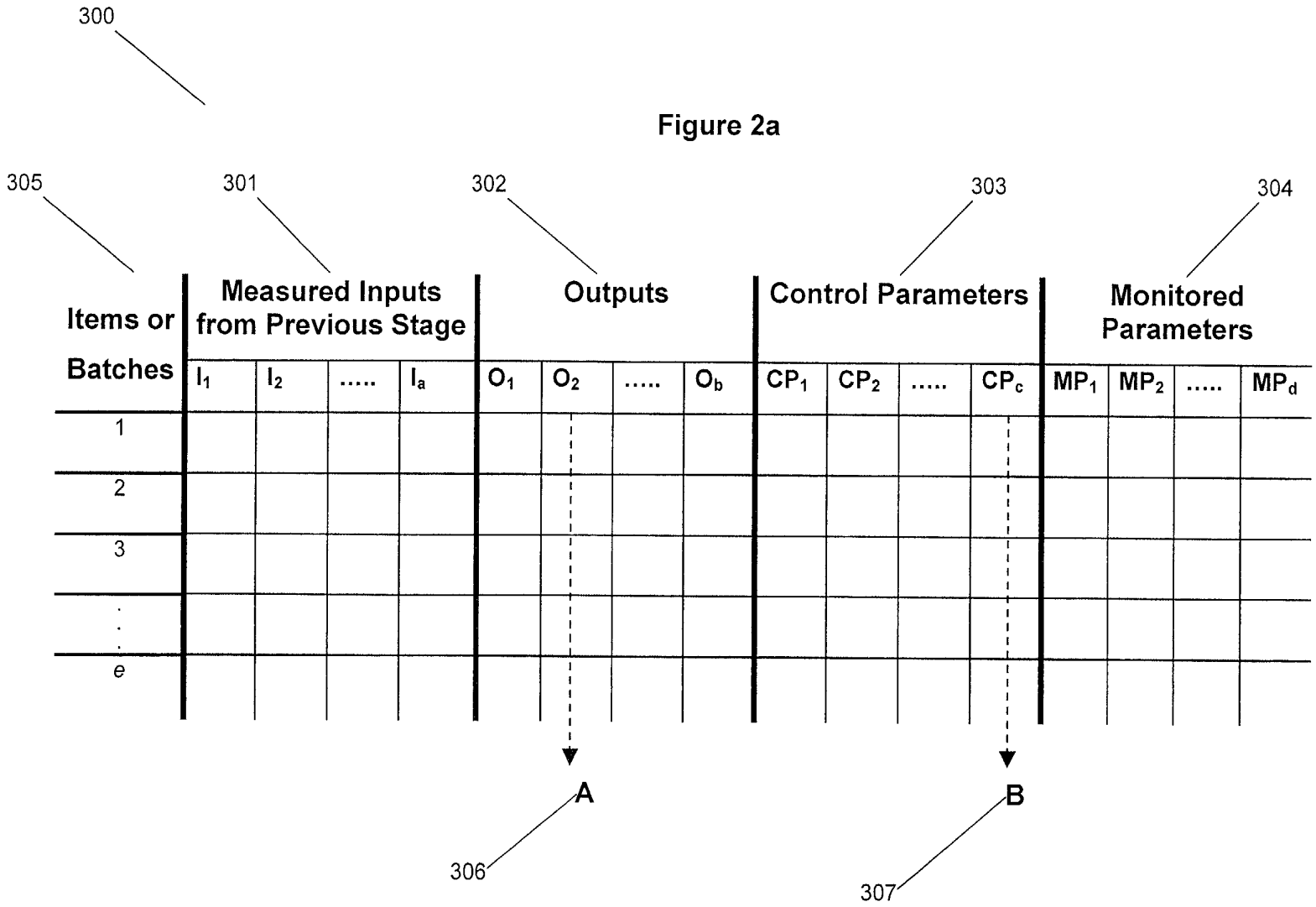


Figure 2a

Figure 3

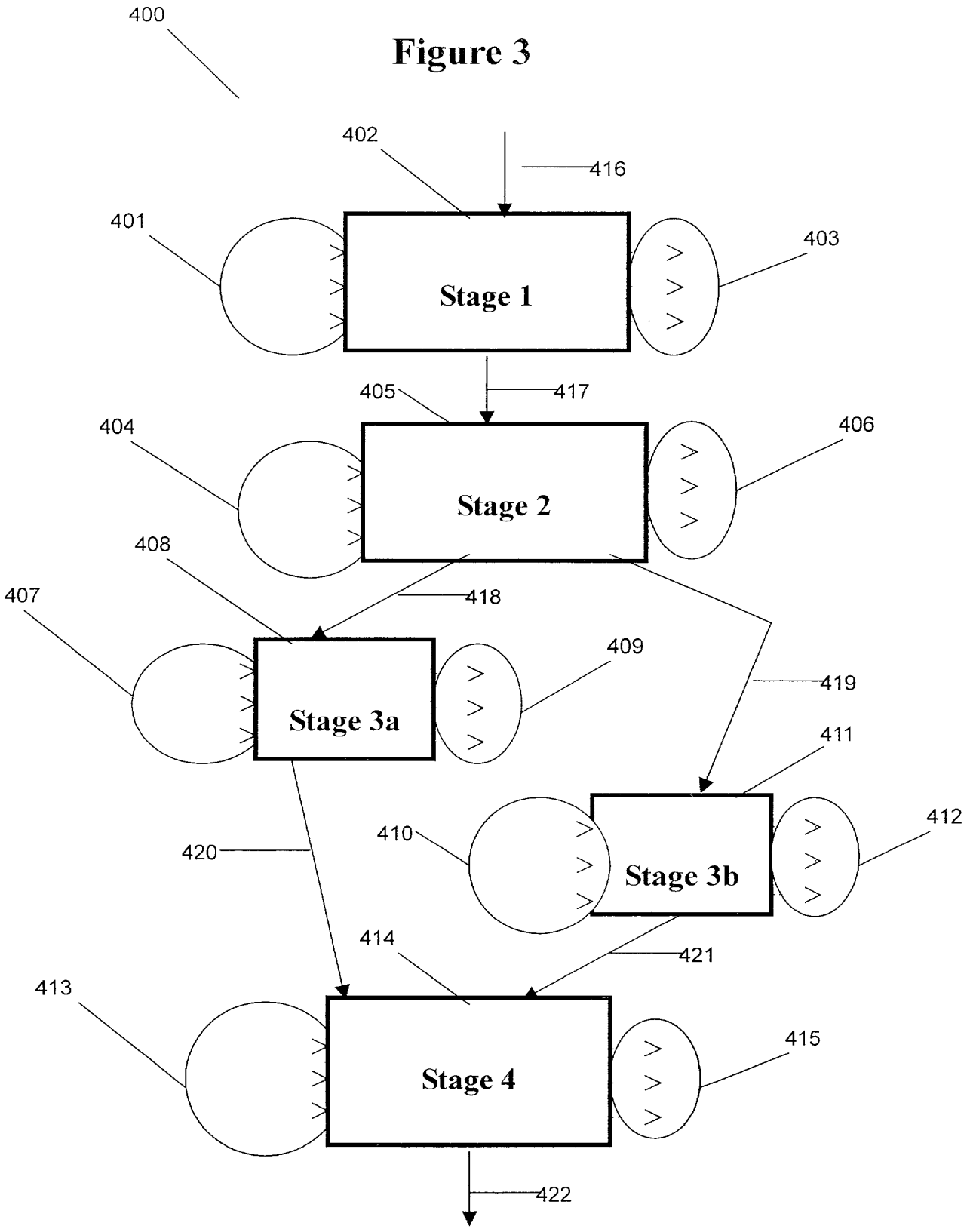
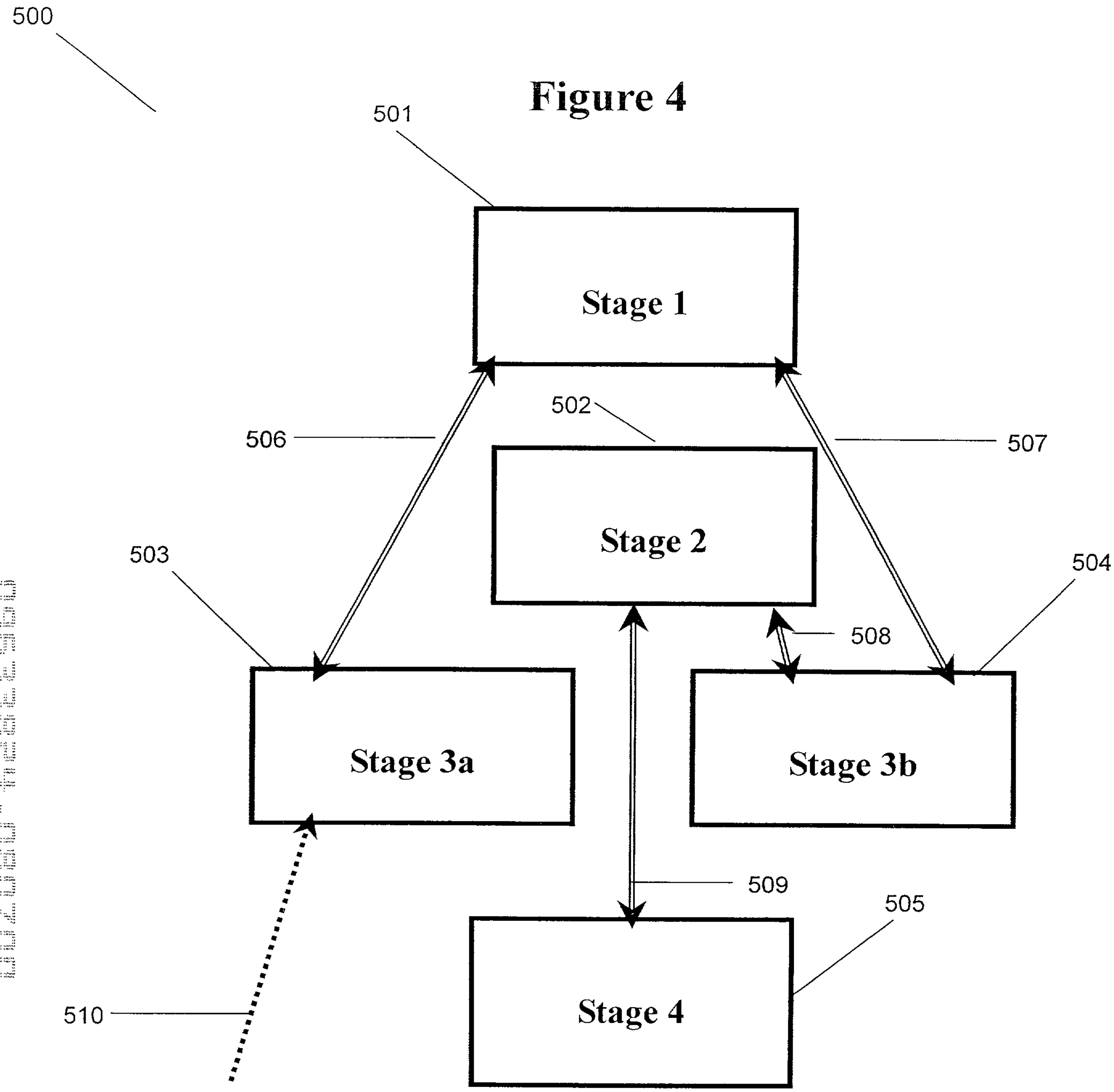

400
402
416
401
403
Stage 1
405
417
404
406
Stage 2
408
418
407
409
Stage 3a
419
411
410
412
Stage 3b
420
414
421
413
415
Stage 4
422

Figure 4



500
501
Stage 1
502
Stage 2
506
507
503
Stage 3a
504
Stage 3b
508
509
505
Stage 4
510

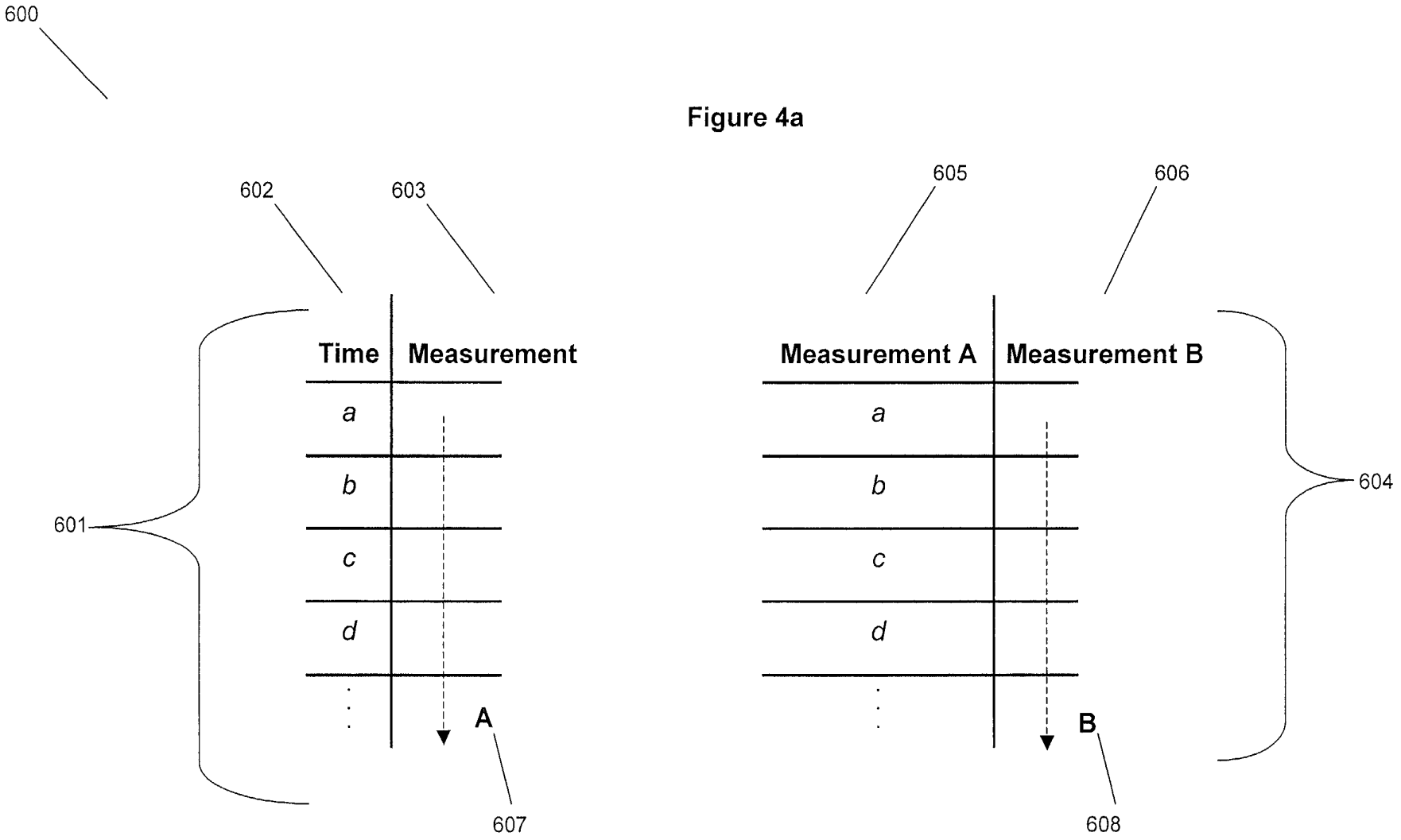
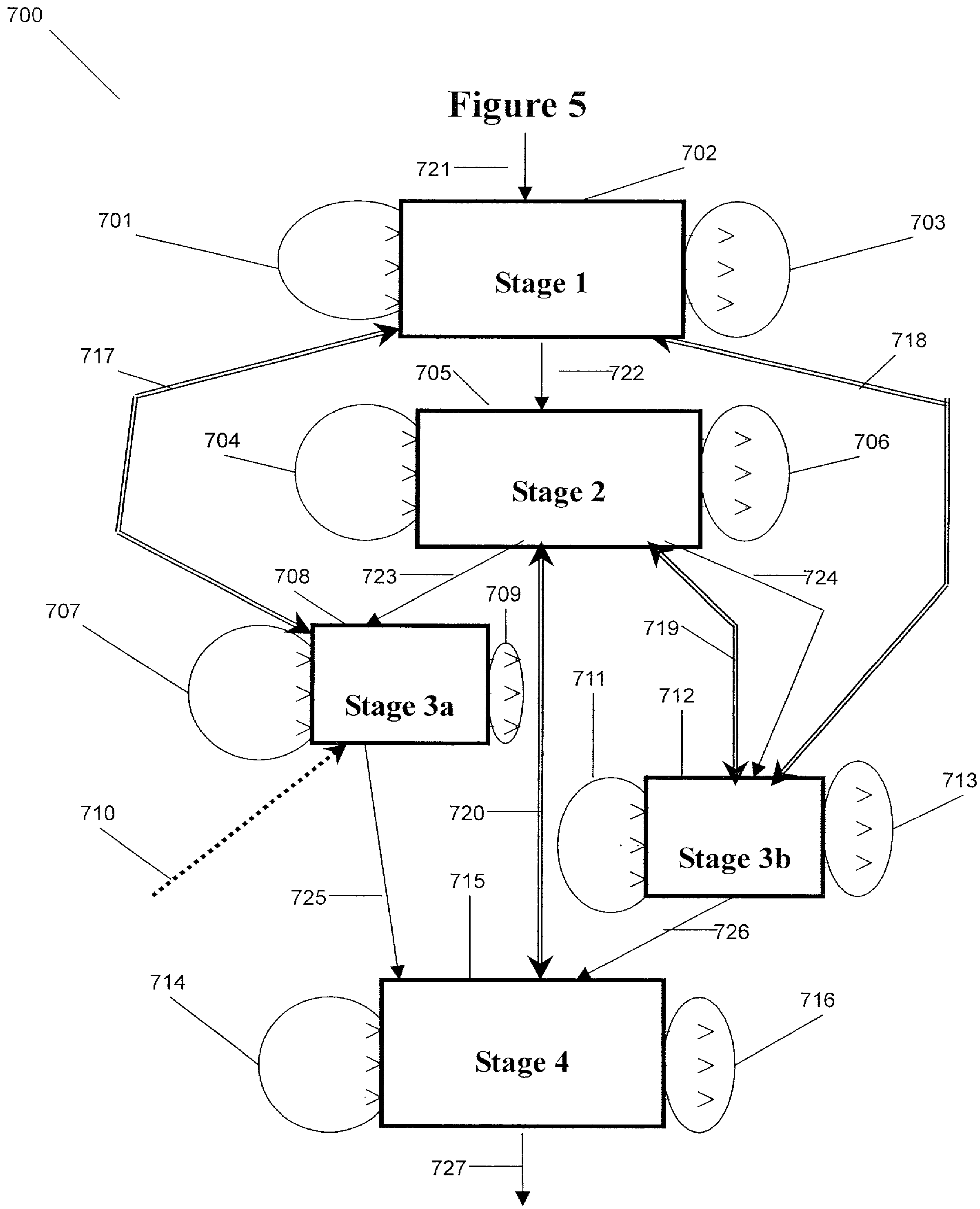


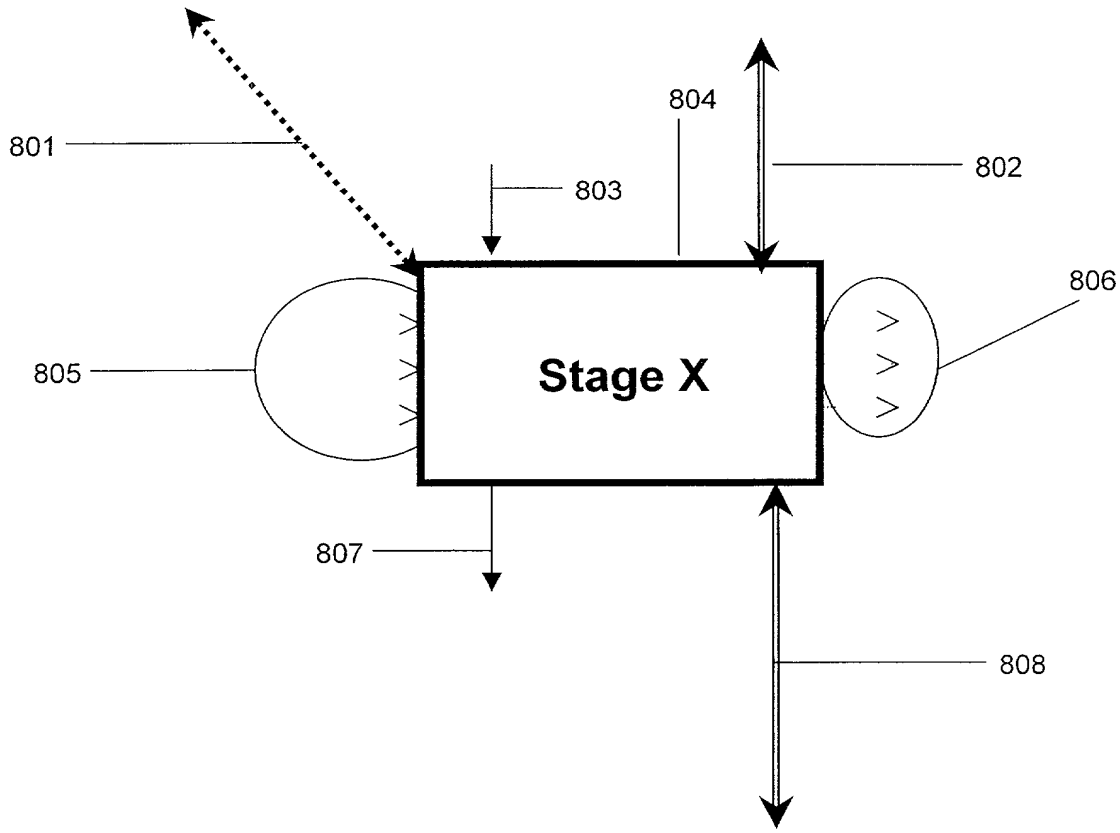
Figure 4a

Figure 5


700
721
702
701
703
Stage 1
717
705
722
718
704
706
Stage 2
708
723
724
709
707
719
Stage 3a
711
712
713
710
720
Stage 3b
725
715
726
714
716
Stage 4
727

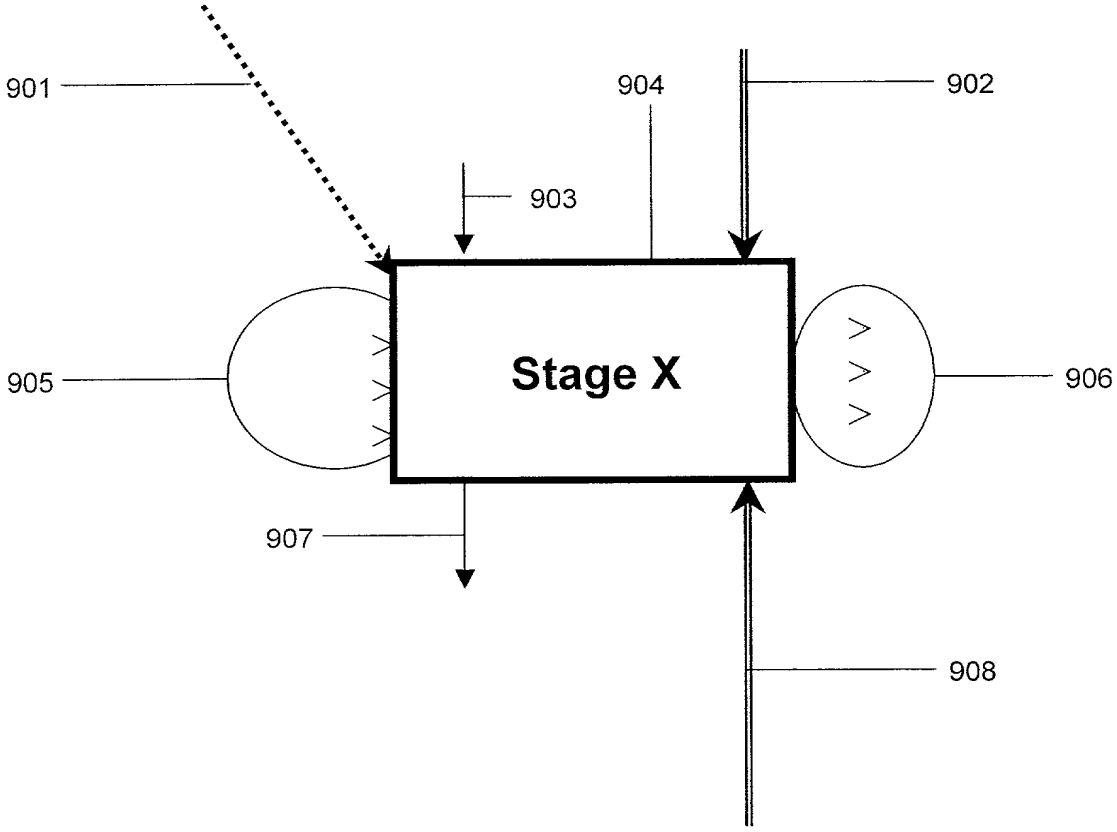
800

Figure 6



900

Figure 7



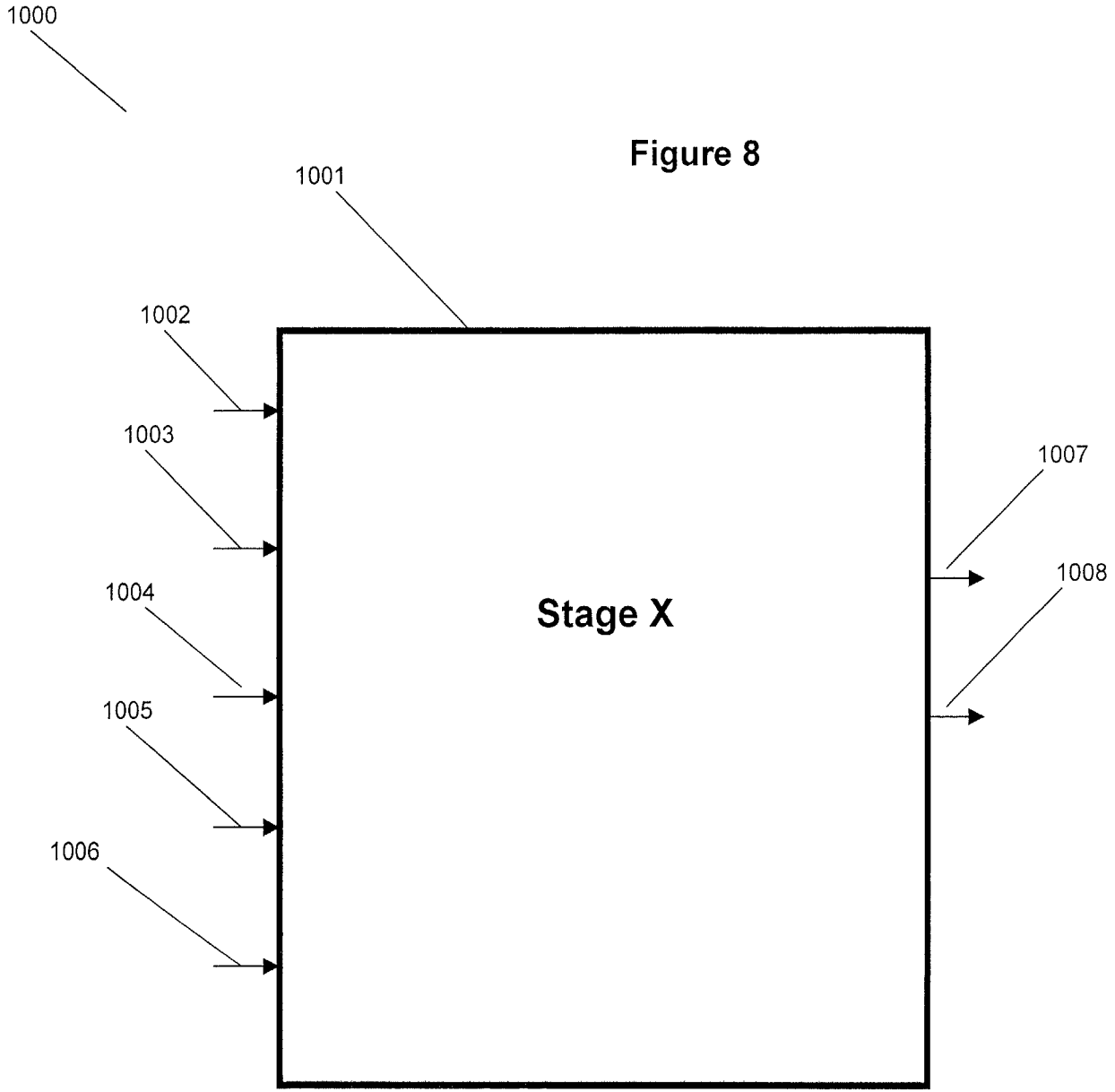
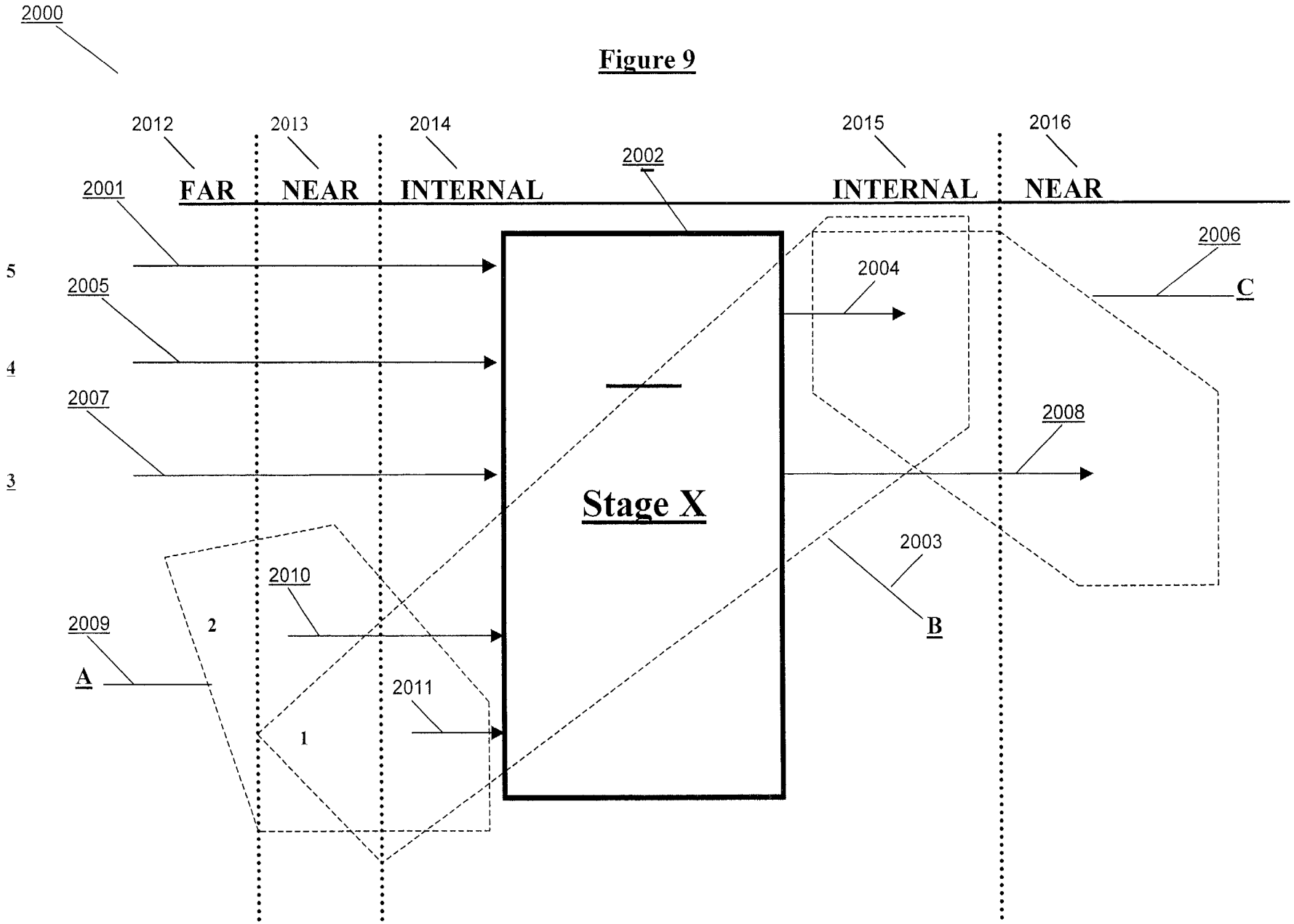


Figure 8

Figure 9



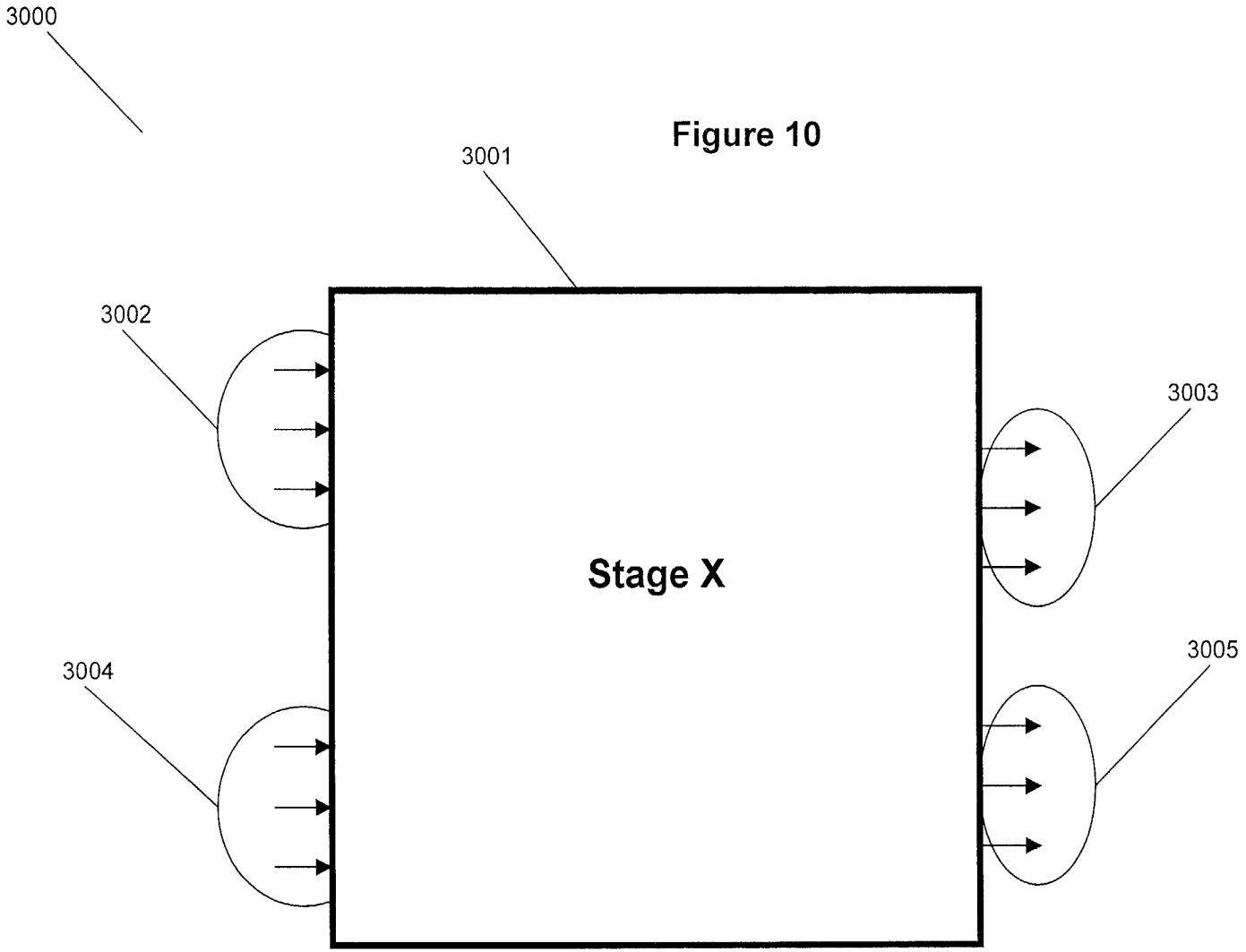


Figure 10

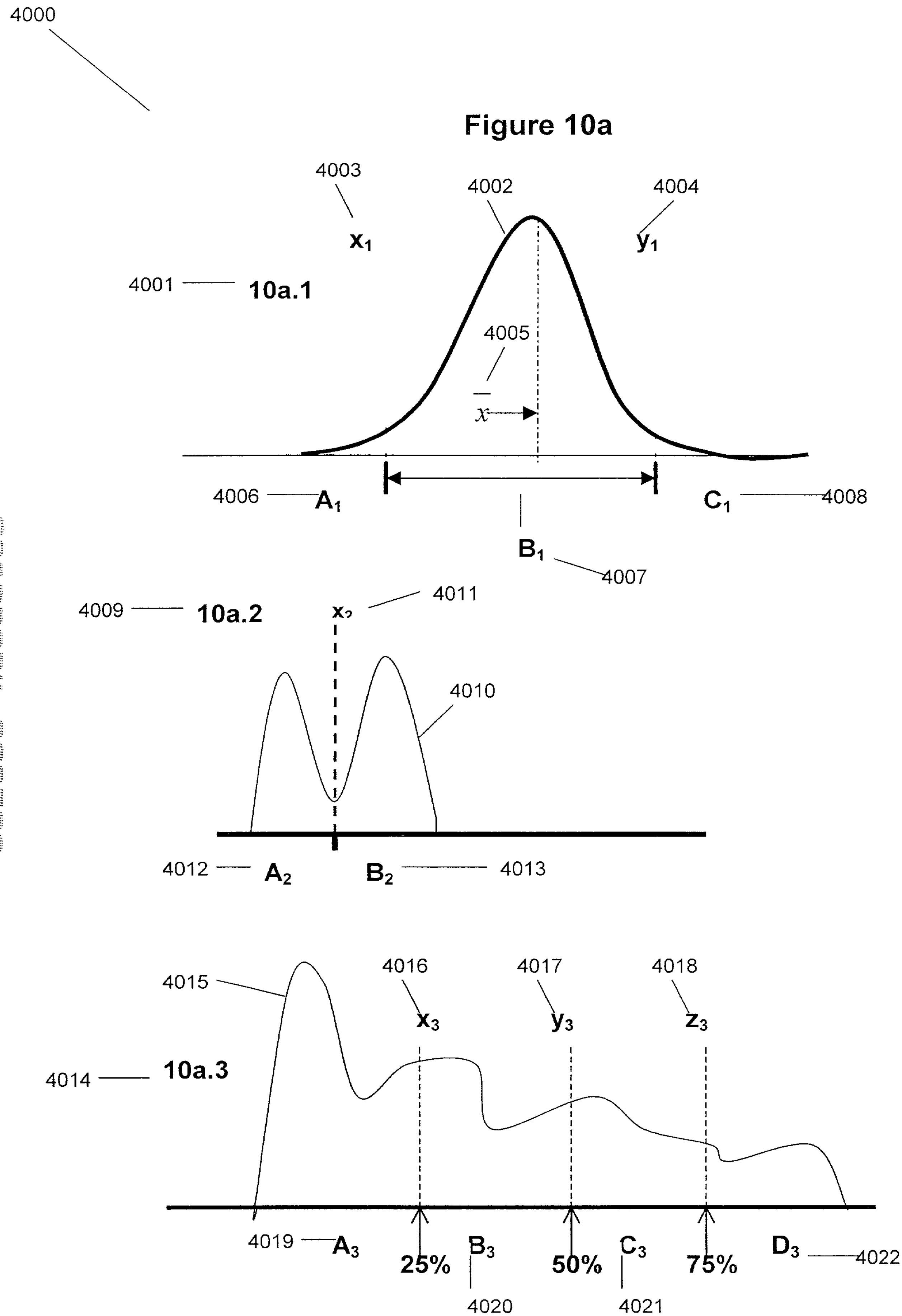

4000
4003
4002
4004
x1
y1
4001
10a.1
4005
x
4006
A1
C1
4008
B1
4007
4009
10a.2
x2
4011
4010
4012
A2
B2
4013
4015
4016
4017
4018
x3
y3
z3
4014
10a.3
4019
A3
B3
C3
D3
4022
25%
50%
75%
4020
4021

Figure 10a

Figure 10b

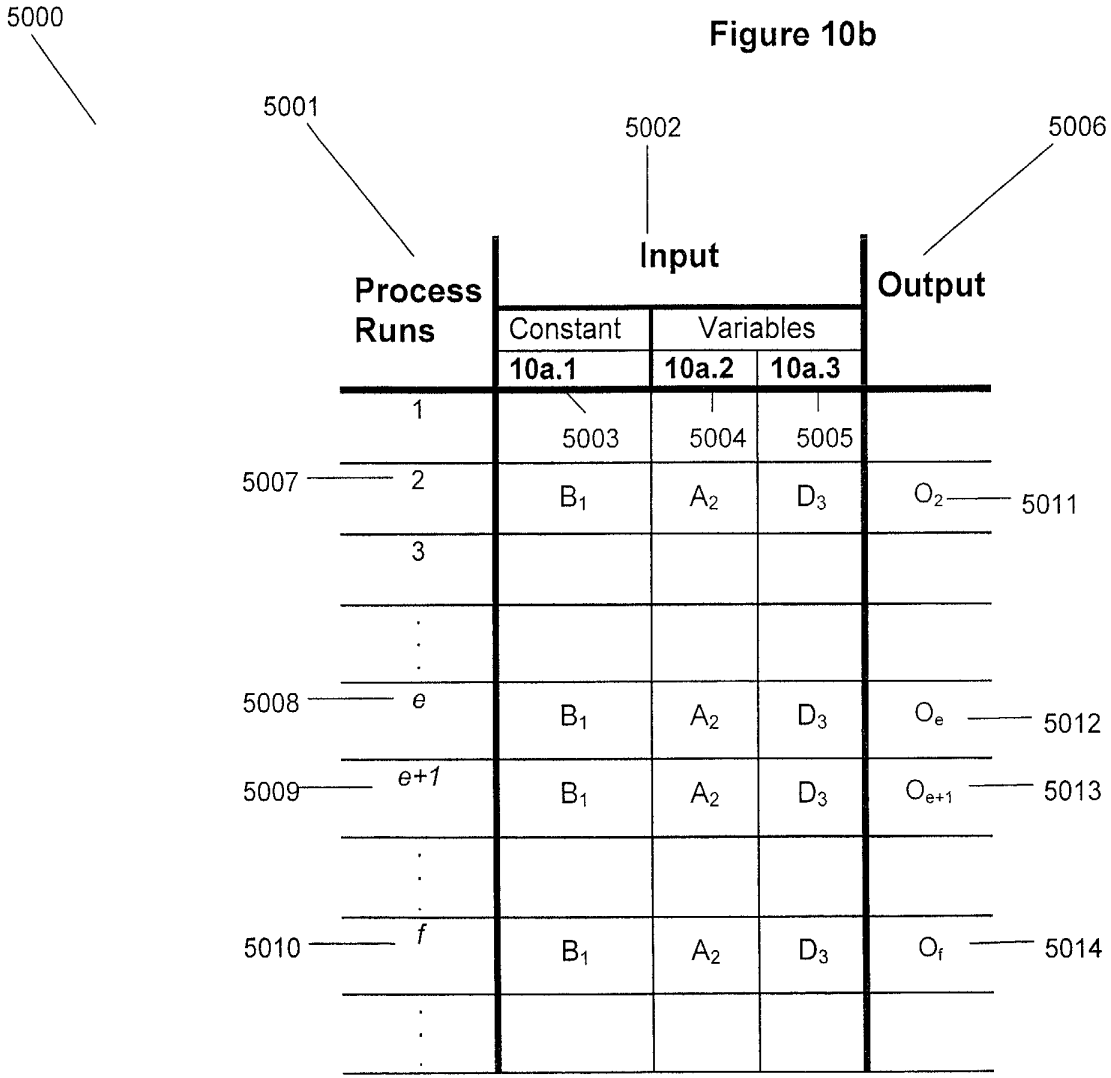

5000
5001
5002
5006
Process Runs
Input
Output
Constant
Variables
10a.1
10a.2
10a.3
5003
5004
5005
1
2
3
e
e+1
f
5007
5008
5009
5010
B1
A2
D3
O2
Oe
Oe+1
Of
5011
5012
5013
5014

Figure 10c

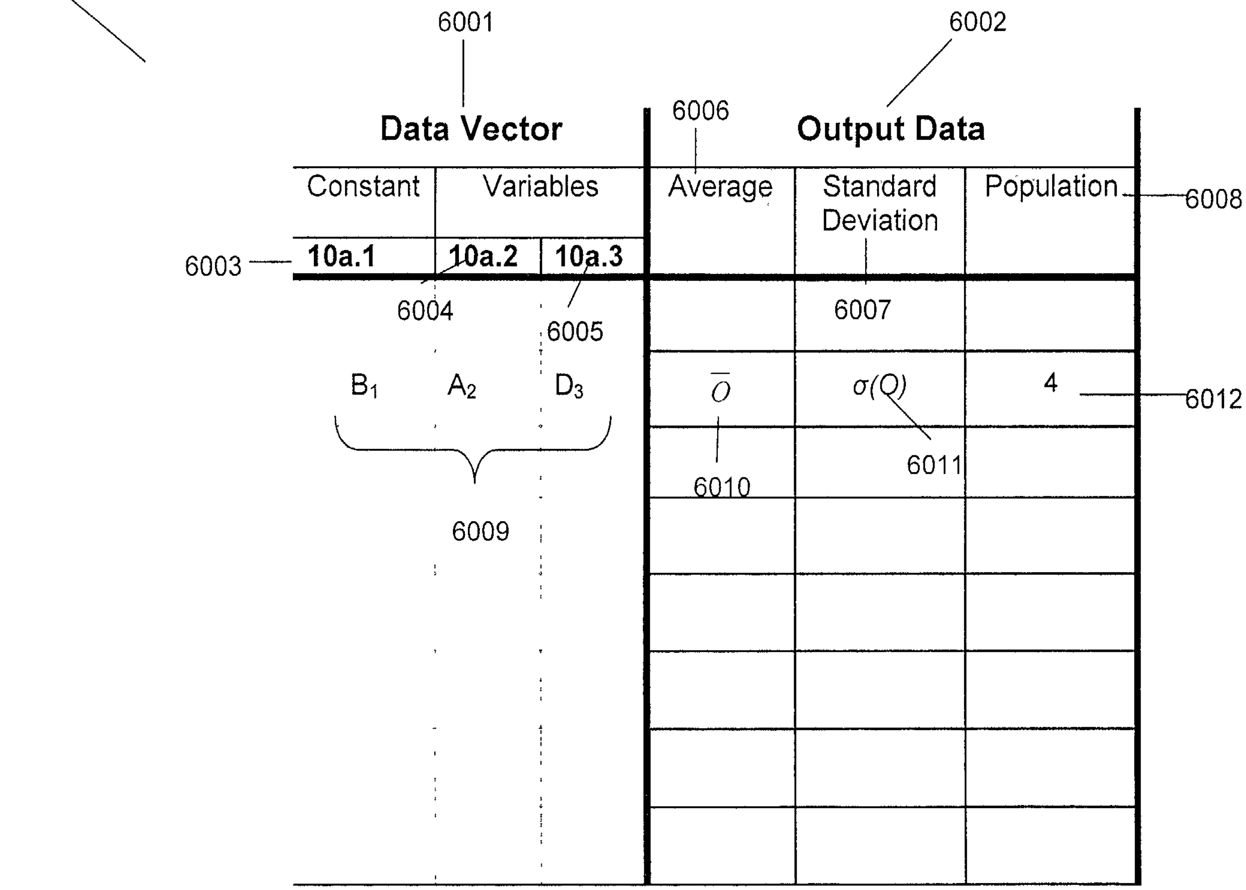

6000
6001
6002
Data Vector
Output Data
6006
Constant
Variables
Average
Standard Deviation
Population
6008
6003
10a.1
10a.2
10a.3
6004
6005
6007
B1
A2
D3
$\overline{O}$
σ(Q)
4
6012
6010
6011
6009

Figure 11

7000

7001 7002 7004 7005 7006 7007 7008

	Data Vector			Output Constant O_1 Data		
	Constant	Variables		Avg.	Stand Dev.	Pop.
7003	**10a.1**	**10a.2**	**10a.3**			
7009	A_1	A_2	C_3	$\bar{O}_1$	$\sigma(O_1)$	7
7010	B_1	A_2	D_3	$\bar{O}_1$	$\sigma(O_1)$	4
7011	C_1	A_2	A_3	$\bar{O}_1$	$\sigma(O_1)$	7
7012	C_1	A_2	B_3	$\bar{O}_1$	$\sigma(O_1)$	6
7013	C_1	A_2	C_3	$\bar{O}_1$	$\sigma(O_1)$	6
7014	C_1	A_2	D_3	$\bar{O}_1$	$\sigma(O_1)$	5
7015	C_1	B_2	C_3	$\bar{O}_1$	$\sigma(O_1)$	5

8000

Figure 12

	Data Vector (8001)			Output Constant O_1 Data (8002)			Output Constant O_2 Data (8003)		
	Constant	Variables (8005)	(8006)	Avg. (8007)	Stand Dev. (8008)	Pop. (8009)	Avg. (8010)	Stand. Dev (8011)	Pop. (8012)
8004	**10a.1**	**10a.2**	**10a.3**						
8013	A_1	A_2	C_3	$\overline{O}_1$	$\sigma(O_1)$	7	$\overline{O}_2$	$\sigma(O_2)$	7
8014	B_1	A_2	D_3	$\overline{O}_1$	$\sigma(O_1)$	4	$\overline{O}_2$	$\sigma(O_2)$	4
8015	C_1	A_2	A_3	$\overline{O}_1$	$\sigma(O_1)$	7	$\overline{O}_2$	$\sigma(O_2)$	7
8016	C_1	A_2	B_3	$\overline{O}_1$	$\sigma(O_1)$	6	$\overline{O}_2$	$\sigma(O_2)$	6
8017	C_1	A_2	C_3	$\overline{O}_1$	$\sigma(O_1)$	6	$\overline{O}_2$	$\sigma(O_2)$	6
8018	C_1	A_2	D_3	$\overline{O}_1$	$\sigma(O_1)$	5	$\overline{O}_2$	$\sigma(O_2)$	5
8019	C_1	B_2	C_3	$\overline{O}_1$	$\sigma(O_1)$	5	$\overline{O}_2$	$\sigma(O_2)$	5

Figure 13

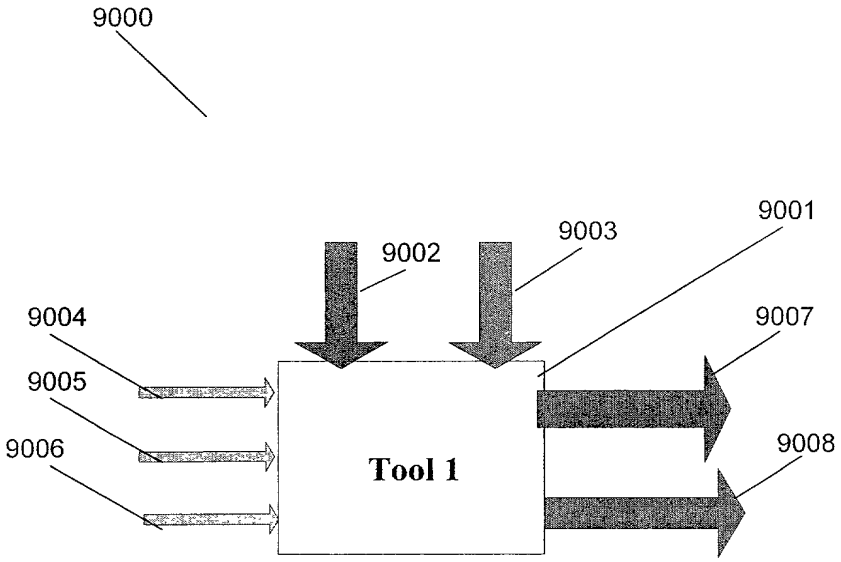


Figure 14

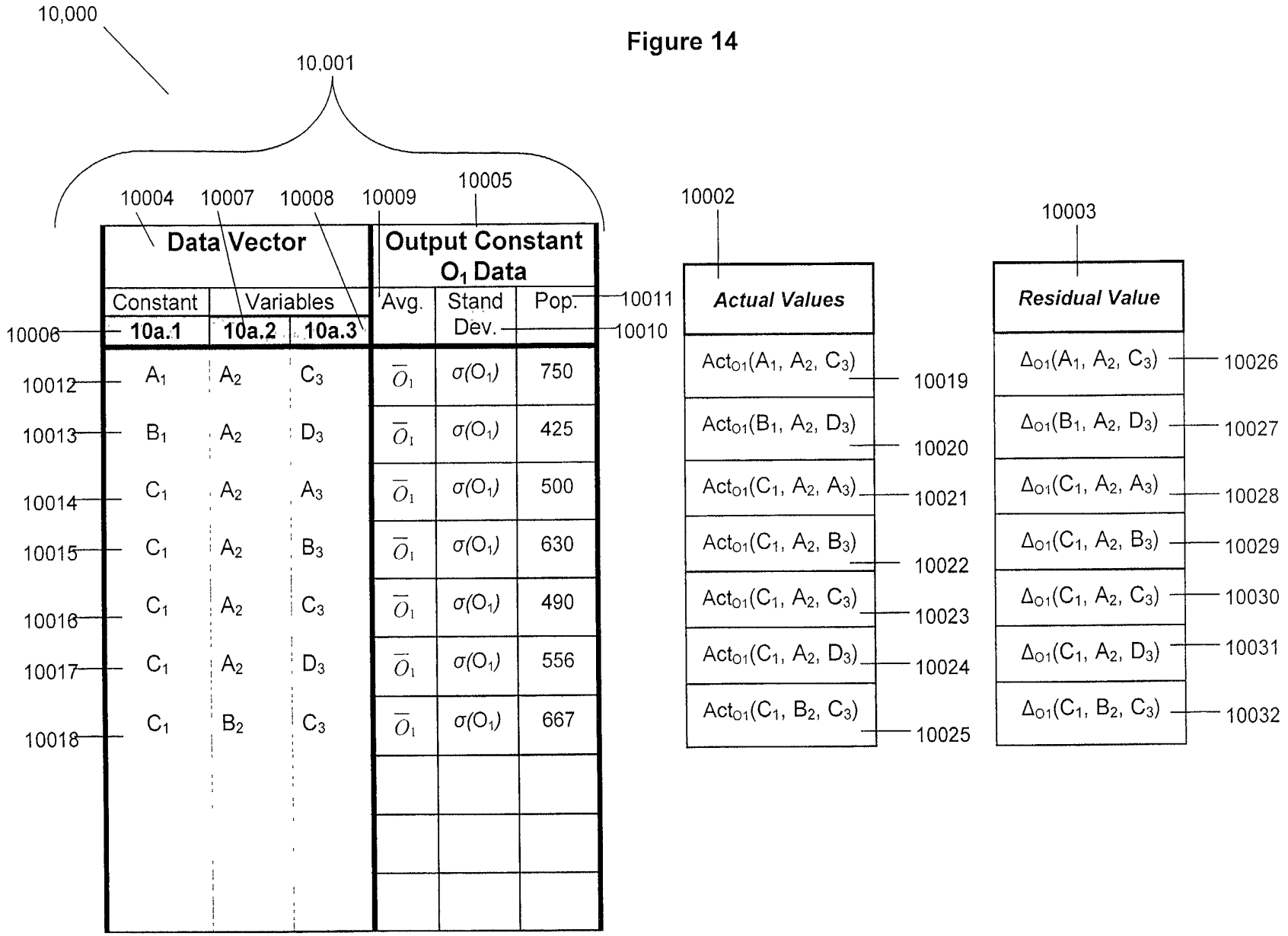

10,000
10,001
10004
10007
10008
10009
10005
10002
10003
Data Vector
Output Constant O_1 Data
Constant
Variables
Avg.
Stand Dev.
Pop.
10006
10a.1
10a.2
10a.3
10011
10010
10012
10013
10014
10015
10016
10017
10018
A_1 A_2 C_3 $\overline{O}_1$ $\sigma(O_1)$ 750
B_1 A_2 D_3 $\overline{O}_1$ $\sigma(O_1)$ 425
C_1 A_2 A_3 $\overline{O}_1$ $\sigma(O_1)$ 500
C_1 A_2 B_3 $\overline{O}_1$ $\sigma(O_1)$ 630
C_1 A_2 C_3 $\overline{O}_1$ $\sigma(O_1)$ 490
C_1 A_2 D_3 $\overline{O}_1$ $\sigma(O_1)$ 556
C_1 B_2 C_3 $\overline{O}_1$ $\sigma(O_1)$ 667
Actual Values
$Act_{O1}(A_1, A_2, C_3)$ 10019
$Act_{O1}(B_1, A_2, D_3)$ 10020
$Act_{O1}(C_1, A_2, A_3)$ 10021
$Act_{O1}(C_1, A_2, B_3)$ 10022
$Act_{O1}(C_1, A_2, C_3)$ 10023
$Act_{O1}(C_1, A_2, D_3)$ 10024
$Act_{O1}(C_1, B_2, C_3)$ 10025
Residual Value
$\Delta_{O1}(A_1, A_2, C_3)$ 10026
$\Delta_{O1}(B_1, A_2, D_3)$ 10027
$\Delta_{O1}(C_1, A_2, A_3)$ 10028
$\Delta_{O1}(C_1, A_2, B_3)$ 10029
$\Delta_{O1}(C_1, A_2, C_3)$ 10030
$\Delta_{O1}(C_1, A_2, D_3)$ 10031
$\Delta_{O1}(C_1, B_2, C_3)$ 10032

Figure 15

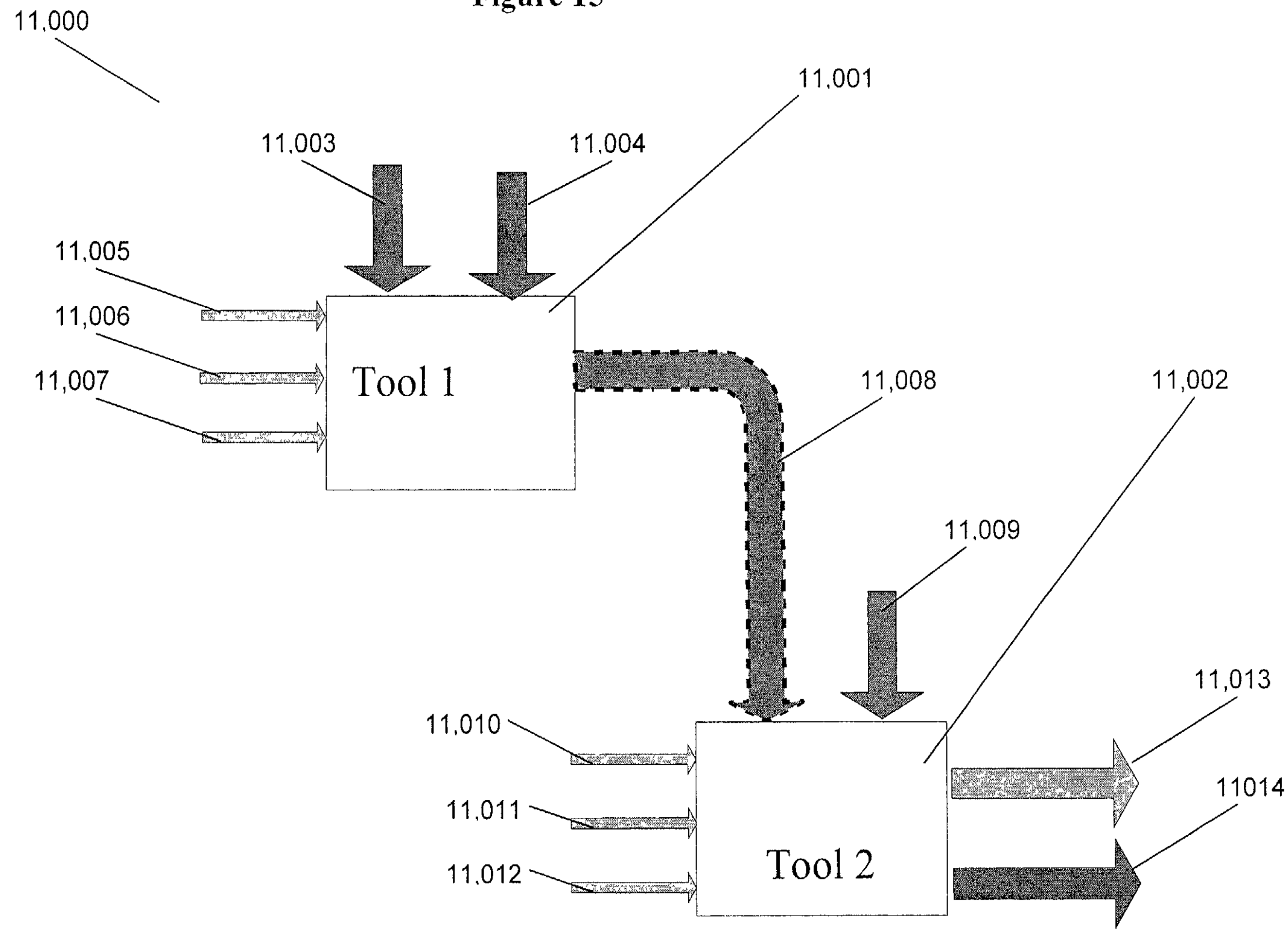
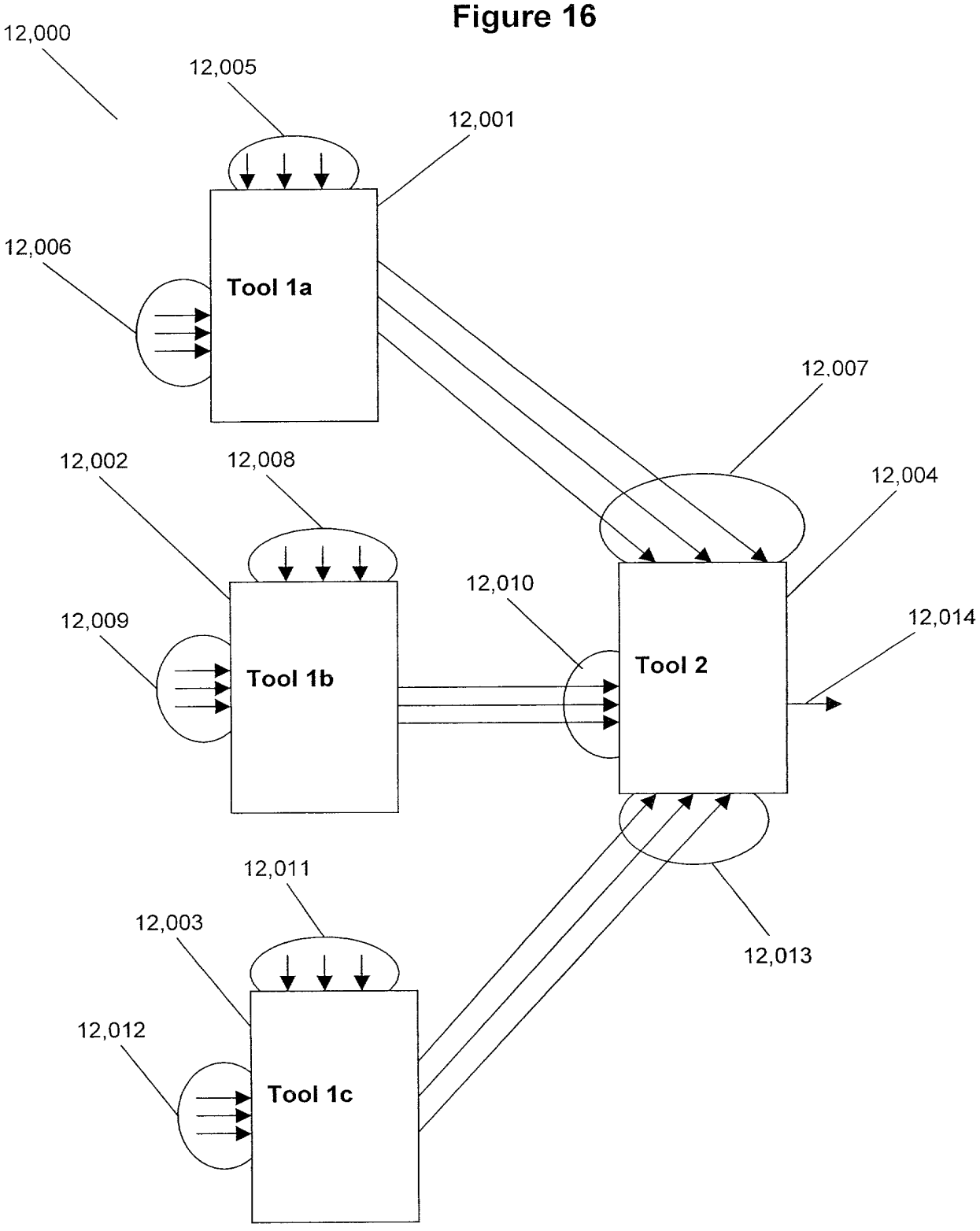

11,000
11,001
11,003
11,004
11,005
11,006
11,007
Tool 1
11,008
11,002
11,009
11,010
11,011
11,012
Tool 2
11,013
11014

Figure 16


12,000
12,005
12,001
12,006
Tool 1a
12,007
12,002
12,008
12,004
12,010
12,009
Tool 1b
Tool 2
12,014
12,011
12,003
12,013
12,012
Tool 1c